

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An apparatus for controlling an operation of a reciprocating compressor comprising: ~~an inductance increasing device~~ a reactor connected to a motor of the reciprocating compressor, the reactor further connected in parallel to a capacitor that countervails an inductance of a coil wound in the motor of the reciprocating compressor, and cuts off a surge current applied to the motor at an initial stage, by increasing the inductance.

2-3. (Canceled)

4. (Currently Amended) The apparatus of ~~claim 3~~ claim 1, further comprising an overcurrent cutting-off device connected to the ~~inductance increasing device~~ reactor for increasing an inductance in series and for cutting off an overcurrent applied to the motor.

5. (Currently Amended) An apparatus for controlling an operation of a reciprocating compressor comprising:
a voltage detecting unit for detecting a voltage applied to the reciprocating compressor according to the variation of a stroke of the reciprocating compressor;
a current detecting unit for detecting a current applied to the reciprocating compressor according to the variation of a stroke of the reciprocating compressor;
a microcomputer for calculating a stroke based on a voltage value detected by the voltage detecting unit and a current value detected by the current detecting unit, comparing the calculated stroke and a stroke reference value, and generating a switching control signal according to the comparison result;

a power supply unit for supplying a stroke voltage to the reciprocating compressor by on-off controlling AC power supplied to the reciprocating compressor with an internal triac controlled by the switching control signal generated by the microcomputer;

~~an overcurrent-cutting-off device~~ a relay connected in parallel to a capacitor that countervails an inductance of a coil wound in a motor of the reciprocating compressor and for cutting off an overcurrent applied to the motor; and

~~a surge-current-cutting-off device~~ reactor connected to the ~~overcurrent-cutting-off device~~ relay in series and for cutting off a surge current which is applied to the motor at an initial stage, by increasing an inductance.

6-8. (Canceled)

9. (Currently Amended) An apparatus for controlling an operation of a reciprocating compressor having a capacitor that countervails an inductance of a coil wound in a motor of the reciprocating compressor for controlling cooling capacity further comprising:

~~an overcurrent-cutting-off device~~ a positive temperature coefficient thermistor connected to the capacitor in parallel and for cutting off an overcurrent generated when the reciprocating compressor is initiated at an initial stage; and

~~a surge-current-cutting-off device~~ reactor connected to the ~~overcurrent-cutting-off device~~ positive temperature coefficient thermistor in series and for cutting off a surge current generated when the reciprocating compressor is initiated at the initial stage, by increasing an inductance.

10-11. (Canceled)